### UNIV-1100 — First Year Seminar: Scientific Computing Learning Community

Instructor: A. J. Meir Peer Instructor: Lauren E. Gaines

Auburn University

September 19, 2012

### Hard Work is Necessary

"Hard work is a trait that most great scientists have. Edison said that genius was 99% perspiration and 1% inspiration. Newton said that if others would work as hard as he did then they would get similar results. Hard work is necessary but it is not sufficient. Most people do not work as hard as they easily could. However, many who do work hard – work on the wrong problem, at the wrong time, in the wrong way, and have very little to show for it."

Richard W. Hamming, *You and your research*, IEEE Potentials, pp. 37–40, October 1993

### For success, hard work is necessary but it is not sufficient!

### Goodhart's Law

"When a measure becomes a target, it ceases to be a good measure" M. Strathern, *"Improving ratings": audit in the British University system*, European Review 5, 1997, pp. 305–321.

# Get Involved!

# Why Should I get involved?

- Allows students to get involved
- Helps build community
- Allows students to discover their passions and strengths
- RESUME BUILDER!
- Typically, busier students do better in all areas.

### Major Specific Organizations

Aerospace	•American Institute of Aeronautics and Astronauts •SAE Aero Design
Biosystems	American Society of Agriculture and Biological Engineering     Quarter Scale Tractor Competition
Chemical	American Institute of Chemical Engineers     Fuel Cell Team
Civil	American Society of Civil Engineering     Institute of Transportation Engineering
Computer Science/ Software	Association for Computing Machinery     IEEE – Computing Society

### Major Specific Organizations

Industrial and Systems	<ul><li>Institute of Industrial Engineers</li><li>Alpha Pi Mu</li></ul>
Materials	Auburn Materials Society
Mechanical	• War Eagle Motor Sports
Polymer and Fiber	<ul> <li>Auburn University Hovercraft Team</li> <li>Polymer and Fiber Exchange Program</li> </ul>

### **Engineering Minors**

#### Automotive Design and Manufacturing

• Enhances students ability to start a career in the automotive industry.

#### Business-Engineering-Technology

• Program to successfully integrate students with technical and management resources.

#### Nuclear Power Generation

• To prepare students for careers in commercial nuclear power generation industry.

# BONUS QUESTION

• Which building on campus is supposedly haunted by an old Civil War ghost?

### Cupola Engineering Ambassadors

• Purpose: ambassadors to the Samuel L. Ginn College of Engineering

- Meeting Time: members only
  - Applications out in January
- Activities: E-Day, Engineering Appreciation Day, Engineering Tours

### **Engineering Student Council**

- Purpose: ESC is the student voice of Auburn's College of Engineering. We serve and promote interaction among students.
- Meeting time: TBD
- Activities: involved in SGA Senate, comprised to representatives from all ENGR organizations.

# BONUS QUESTION

• What are the 4 Names our university has held since it's founding in 1856?

### **Engineers Without Borders**

- Purpose: To bring the modern marvels of engineering to poverty stricken countries worldwide.
- Meeting Time: Thursdays @ 7pm in Shelby 1126
- Activities:
  - Quidditch for Quesimpuco
  - Yearly Trips to Bolivia



### Society of Women in Engineering

- Purpose: Stimulate women to achieve full potential in careers as engineers and leaders.
- Meeting Time: Thursdays @ 6:30 in Shelby 1124
- Activites: philanthropy, professional



### War Eagle Motorsports

- Purpose: Allows college students the opportunity to design, build, and race cars.
- Meeting Time: Mondays @ 7:00pm in Wiggins Hall.
- Activities:
  - Formula SAE
  - Baja SAE
  - Hovercraft Team



# BONUS QUESTION

• Which building was the first building on campus to be lighted by Electricity?

